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WHAT IS CLAIMED IS:

- 1. A microscope having a stand (3) and having a revolving nosepiece (1) rotatably articulated on the stand (3), the revolving nosepiece (1) having at least two receptacles (4) for one objective (2) each, and an objective (2) being deliverable into a beam path (5) of the microscope by the rotation of the revolving nosepiece (1), wherein one transponder (6) each is associated with the objective (2) or objectives (2), and a reading device (7) for communication with the transponder (6) is associated with the stand (3).
- 2. The microscope as defined in Claim 1, wherein the transponder (6) is arranged on the barrel (8) of the objective (2) or objectives (2).
- 3. The microscope as defined in Claim 1 or 2, wherein the transponder (6) is arranged on the upper side of the baffle plate (11) of the objective (2) or objectives (2).
- 4. The microscope as defined in Claim 3, wherein the baffle plate (11) comprises a preferably lateral cutout (12).
- 5. The microscope as defined in Claim 4, wherein the cutout (12) is a milled recess.
- 6. The microscope as defined in one of Claims 1 through 5, wherein the transponder (6) comprises an antenna (10) or antenna coil.
- 7. The microscope as defined in Claim 6, wherein the antenna (10) or antenna coil is arranged on the screw ring of the objective (2) or objectives (2).

- 8. The microscope as defined in Claim 6 or 7, wherein the antenna or antenna coil (10) is attached to the transponder (6).
- 9. The microscope as defined in one of Claims 6 through 8, wherein the transponder (6) is bonded or soldered onto the antenna (10) or antenna coil.
- 10. The microscope as defined in one of Claims 6 through 9, wherein the transponder and the antenna or antenna coil are arranged in a common housing.
- 11. The microscope as defined in one of Claims 1 through 10, wherein the transponder is embodied as a read transponder.
- 12. The microscope as defined in one of Claims 1 through 10, wherein the transponder (6) is embodied as a read-write transponder.
- 13. The microscope as defined in one of Claims 1 through 12, wherein an excitation coil for activation of the transponder (6) is associated with the reading device (7).
- 14. The microscope as defined in one of Claims 1 through 13, wherein the reading device (7) is attached to the stand (3).
- 15. The microscope as defined in one of Claims 1 through 14, wherein the reading device (7) is arranged in the revolving nosepiece (1).
- 16. The microscope as defined in one of Claims 1 through 15, wherein the reading device (7) comprises a read antenna (9) and an electronic readout system.

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- 17. The microscope as defined in Claim 16, wherein the read antenna (9) is attached to the stand (3) and/or arranged in the revolving nosepiece (1).
- 18. The microscope as defined in Claim 16 or 17, wherein the read antenna (9) is arranged around the optical axis.
- 19. The microscope as defined in one of Claims 16 through 18, wherein the electronic readout system is arranged in the revolving nosepiece (1) or integrated into the revolving nosepiece (1).
- 20. The microscope as defined in one of Claims 1 through 19, wherein the reading device (7) additionally comprises a writing unit.
- 21. The microscope as defined in one of Claims 1 through 20, wherein the magnification and/or type of the particular objective (2) are stored in the transponder (6).
- 22. The microscope as defined in one of Claims 1 through 21, wherein the degree of correction of the objective (2) or objectives (2), the equalization length, and/or the color profile are stored in the transponder (6).
- 23. The microscope as defined in one of Claims 1 through 22, wherein the wavelength and/or line width of filters or filter systems are stored in the transponder (6).
- 24. The microscope as defined in one of Claims 1 through 23, wherein distribution data, batch numbers, and/or maintenance or repair data are stored in the transponder (6).